

Issues with Library BadgerNet Circuits and TEACH Funding

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The conversion of 408 library circuits to the new BadgerNet Converged Network (BCN) started in January 2006. At this time, 99% of the libraries have completed the conversion. Unfortunately, there are about 90 libraries (22% of all BCN libraries) that have reported slow Internet access after their new BCN circuit was installed. In some instances this problem has been traced to a misconfigured router or other network device. However, for the majority of libraries, their circuit is simply too small to support the number of Internet workstations in the library.* Normally when bandwidth is insufficient, the TEACH Wisconsin program increases the library's bandwidth as needed. Unfortunately, TEACH has committed all of its funding for 2006/07. (TEACH allocates approximately \$3.35 million annually for library subsidies on the BCN.) Although there is ample unused bandwidth on the BCN, the real issue is who will pay for the additional bandwidth needed by some libraries?

The division is addressing this issue in the following manner.

- Encouraging system network operators to closely monitor their networks to make certain there is not a non-bandwidth issue causing the slow Internet access.
- Working with systems, their member libraries and TEACH, to see if any options exist to reallocate bandwidth from within the library system WAN.
- Discussing this issue with Matt Miszewski, State Government CIO. DPI is also requesting that DOA ask for an increase in the TEACH allocation in the 2007-09 biennial budget. DPI has given preliminary budget information to DOA and a list of the 90 libraries with circuit issues.

At this time, TEACH is offering what it refers to as "Second Tier" funding for any public libraries or other E-rate eligible TEACH customers with bandwidth issues. (The "first tier" is the current TEACH subsidy program.) This Second Tier option enables a library to increase its bandwidth (system aggregated circuit or individual library circuit) and pay the incremental part of the additional bandwidth cost (48%) not covered by the TEACH E-rate subsidy. Below are two examples that Gordy Hanson from TEACH has drafted on how this works. If systems or their member libraries want to pursue this option, contact Gordy directly (608-261-5054, gordon.hanson@wisconsin.gov).

1) To go from 3.0Mbps to a 5.0Mbps circuit:

The library will pay 48% of the increase from 3M to 5M. TEACH pays the remaining 52%.

- 3.0M costs TEACH \$1080/month.
- 5.0M will cost TEACH \$1440/month.
- The *increase* in cost to go from 3M to 5M is \$360/month (\$1440 - \$1080).
- Since you will be paying 48% of this increase, you will add \$172.80 (48% of \$360/month) to your current TEACH bill of \$250/month for a total of \$422.80/month. The annual increase is \$2,073.60. Therefore, a library's annual bill from TEACH will be \$5,073.60 (\$3,000.00 + \$2,073.60)

* The size of the library's circuit was based on a survey system staff completed in April 2005.

2) To go from 768Kbps to a 1.5Mbps circuit:

The library will pay 48% of the increase from 768K to 1.5M. TEACH pays the remaining 52%.

- 768k costs TEACH \$540/month.
- 1.5M will cost TEACH \$600/month.
- The *increase* in cost to go from 768K to 1.5M is \$60/month (i.e., \$600 - \$540).
- Since you will be paying 48% of this increase, you will add \$28.80 (i.e., 48% of \$60/month) to your current TEACH bill of \$100/month for a total of \$128.80/month. The annual increase is \$345.60. Therefore, a library's annual bill from TEACH will be \$1,545.60 (\$1,200.00 + \$345.60)

For many smaller libraries that are maxing out their 768K circuit, this will mean an annual cost increase of \$345.60 to double their capacity. (For a library with a 512K circuit to go to 1.5M will cost an additional \$864/annually.)

BCN bandwidth costs are found on the Department of Administration's (DOA) BadgerNet website at http://www.doa.state.wi.us/docs_view2.asp?docid=4614.

The division will keep you informed of further developments in this area. If you have any questions, contact Bob Bocher or Gordy Hanson.